



# The art of redemption

Integrating the detritus of discontinued mining operations with the surrounding landscape has given rise to a unique art form.

**L** AND ART ON A MINE DUMP? WHAT COULD possibly motivate such a decision?" I wondered as we set out on our seven-hour journey to Koingnaas, a remote mining village in the far Northern Cape, to attend the launch of the monumental earth-work sculpture that renowned land artist Strijdom van der Merwe recently created for De Beers Consolidated Mines.

There are only three ways in which all base materials that modern man uses can be accrued: synthetic production in laboratories, growing them or mining them. Of the three, extracting valuable minerals and other geological materials from the Earth is the oldest. In Europe, the advent of mining coincided with man's transition from nomad to agriculturalist, about 7 000 years ago. But in Africa, mining can be traced back at least 46 000 years.

The oldest-known mine is right on our doorstep. The 1964 archaeological diggings at Lion Cavern at Dumaneni, six kilometres south of Malelane, a site in the Ngwenya mountains in Mpumalanga, uncovered prehistoric stone tools in patches of disturbed soil up to 30 metres below the surface. It is believed that the beautifully crafted hand axes were used to pry loose the hematite, a type of iron ore that, when ground down to a fine powder, produces the red pigment commonly known as "ochre".

In siSwati the red ochre is called *ludvumane*. It

means "four times the sound of thunder". It was used in ancient rituals as a "spiritual cosmetic" for application on rocks, objects and people alike. Chiefs and diviners applied the sacred red powder to their bodies and faces to endow themselves with power.

In a Stone Age cosmology unfettered by scientific insistence on rationality, the red substance extracted from the red veins was the Blood of Mother Earth.

And for Stone Age man, taking Her Blood was a major issue, renegade scientist Lyall Watson assures us in his book *Dreams of Dragons*. "Wherever [...] mining did take place, it was always surrounded by elaborate rites and superstitions. Digging never began without appropriate sacrifices and daily offerings. And, most important of all, when the miners had what they needed, the damage was repaired by filling in the shafts with the rubble taken from them. The skirts of the violated Earth had to be decently rearranged. All the old Swaziland diggings were meticulously repaired. The holes were filled and the wounds allowed to heal. Only in this way, it seems, could the diggers live with their sacrilege and keep faith with the Earth itself." That was mining, South African-style, 46 000 years ago.

Today, things are done for different reasons and in different ways. We mine for profit and are governed by legislation.

Local mining for profit began in earnest in >>



**AM/PM Shadow Lines**, the monumental land art earthwork sculpture by renowned land artist Strijdom van der Merwe created at the De Beers Namaqualand Mines in the Northern Cape. In keeping with the tradition of this unique art form, Van der Merwe used only what was available on site. It took five operators 22 days (182 hours) using earth-moving equipment (normally reserved for mining) to move 7 000 tons of gravel and alluvial into 14 neat rows. The entire work is 100 metres in diameter.

PHOTOGRAPH: STRIJDOM VAN DER MERWE

>> 1867 after a boy called Erasmus Jacobs found a stone on the banks of the Orange River and realised that it was something special. A gem.

Modern mining technology has subsequently revealed that South Africa holds a whole basket of gems; in fact, right beneath our feet is one of the richest treasure troves of minerals in the world – almost 90 percent of the platinum metals, 80 percent of the manganese, 41 percent of the gold (to name but a few of the riches). In 2005, local diamond production came to 15 800 000 carats (that's 3.2 tons).

But what do these figures and percentages mean? It means wealth, enormous wealth, but it also implies enormous responsibility and unequivocal accountability. Mining is, by its very nature, a violation. It destroys natural ecosystems, causes erosion and sink-holes, and contaminates the soil and ground and surface water with chemicals. Even decades after mining ceases, dust from the tailings (the slurry produced by the chemical washing) can cause havoc to surrounding ecosystems.

### Rearranging the skirts

FORTUNATELY FOR US, SOUTH AFRICA NOT ONLY has legislation in place to govern these plans and processes, but the laws and policies are also strictly enforced. No fewer than 13 separate Acts, the most important being the Mineral and Petroleum Resources Development Act of 2002, the National Environmental Act of 1998 and the Mines and Works Act of 1956, place absolute and full responsibility for post-mining landscape restoration on the shoulders of mining operators.

In other words, the mining operators have to "rearrange the skirts of Mother Earth", whether they want to or not. It does not seem as if the miners are shying away from this responsibility. Today, the precious top soil (container of all living material) is diligently "harvested" and "stockpiled" for future restorations and, in the case of De Beers and the alluvial diamond mines of the Namaqualand, huge areas are in the process of being restored and repatriated with the precious species-rich endemic succulent Karoo plants. De Beers is doing this at a cost of between R35 000 and R60 000 a hectare.

A severe headache, however, is caused by the fact that there was a time when little or no thought and effort were spared for "one day". The De Beers Namaqualand Mines are "old" mines – the first recovery plant was built in 1930. And for at least the first 50 years, mining methods and techniques were not sensitive to ecological or environmental issues. Some of the early sites are so badly damaged that their potential for restoration is extremely low.

But what can one do with the patches of dead earth? An interesting option presented itself when some really clever and innovative thinkers, such as Chuck Hutchinson (Conservation International) and Robert Weiner (Public Eye), became part of finding an

answer. Why not create a massive land-art park, inviting artists to re-image the derelict heaps and dust and tailings dams into large objects of beauty? One can turn the barren bits into an asset that will bring tourists and travellers to this place.

They started by commissioning Van der Merwe to create a land art sculpture.

Land art is an art form that is created in nature, using only what a specific site offers at a specific moment. The surrounding landscape always forms as intricate a part of the artwork as the sticks, leaves, trees, water, rubble or rocks that are used. In keeping with the tradition, Van der Merwe used only what was already there: 7 000 tons of alluvial rock and gravel, a D275 bulldozer, a W600 front-end loader, a PC200 medium excavator and a B40D articulated dump truck; in other words: mining rubble and mining equipment.

Land art parks are often created in desolate, damaged and remote locations. All over the world these parks have proved their success – injecting huge amounts of energy into burgeoning tourism markets.

The suggestion for such a park poses a possible solution to another major issue De Beers is facing: that of social and economic responsibility for the communities in the vicinity of its mining operations.

### Sustainable new economy

THE RECENT GLOBAL FINANCIAL CRISIS HAS HAD a detrimental effect on the diamond industry. A diminishing market plus rising costs have prompted De Beers to cut production at both its Koingnaas and Kleinsee plants. The cut from a 3 500-strong workforce (during the mid-1980s) to an estimated 200 by the end of this year has affected the welfare of those two communities severely. And that is where the Living Edge of Africa Project comes in – it was created to assist in the planning and implementation of a sustainable new economy for Namaqualand. Art and eco-tourism is just one of the options being considered. Some others include a wind farm, seawater greenhouses, abalone beds, oyster farms and a correctional facility.

"Is this the beginning of a land art park of international stature and reputation?" I am eager to know from Tom Tweedy, the communications manager for De Beers Consolidated Mines.

It seems to depend not so much on De Beers as on the reaction of at least two government departments: the Department of Mineral Resources and the Department of Environmental Affairs. If they decide that a land art park is a good, acceptable complement to ecological restoration, it might happen.

If not, Van der Merwe's beautiful, ecologically sensitive *AM/PM Shadow Lines* will stand as a lone reminder of a fabulous dream.

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